CLAIMS

What is Claimed:

1. A method for detecting the presence of a cancer in a patient, comprising the steps of:

(a) contacting a biological sample obtained from the patient with a binding agent that binds to a polypeptide comprising the amino acid sequence set forth in SEQ ID NO:161;

(b) detecting in the sample an amount of polypeptide that binds to the binding agent; and

(c) comparing the amount of polypeptide to a predetermined cut-off value and therefrom determining the presence of a cancer in the patient.

2. The method of claim 1 wherein said binding agent is an antibody or antigen-binding fragment thereof.

3. The method of claim 2 wherein said antibody or antigen-binding fragment thereof is a monoclonal antibody or antigen-binding fragment thereof.

4. The method of claim 3 wherein said monoclonal antibody or antigen-binding fragment thereof specifically binds to an amino acid sequence set forth in any one of SEQ ID NOs:382, 562 and 563.

5. A composition comprising a first component selected from the group consisting of physiologically acceptable carriers and immunostimulants, and a second component comprising an isolated antibody, or antigen-binding fragment thereof, that specifically binds to a polypeptide set forth in SEQ ID NO:161.

6. The method of claim 5 wherein said immunostimulant is an adjuvant.

7. The method of claim 6 wherein said adjuvant is selected from the group consisting of Freund's Incomplete Adjuvant; Freund's Complete Adjuvant; Merck Adjuvant 65; AS-1, AS-2; aluminum hydroxide gel; aluminum phosphate; a salt of calcium, iron or zinc; an insoluble suspension of acylated tyrosine acylated sugars; cationically or anionically derivatized polysaccharides; polyphosphazenes; biodegradable microspheres; monophosphoryl lipid A, QS21, aminoalkyl glucosaminide 4-phosphates, and quil A.

8. A method for stimulating an immune response in a patient, comprising administering to the patient a composition of claim 5.

9. A method for the treatment of a lung cancer in a patient, comprising administering to the patient a composition of claim 5.

10. A diagnostic kit comprising at least one antibody or antigen-binding fragment thereof that specifically binds to a polypeptide set forth in SEQ ID NO:161 and a detection reagent, wherein the detection reagent comprises a reporter group.

11. The diagnostic kit of claim 8 wherein said antibody or antigen-binding fragment thereof specifically binds to the polypeptide set forth in any one of SEQ ID NOs:382, 562 and 563.